

## **HP CP6015/CM6030/CM6040MFP Remove and Shake Black or Color Cartridges" or "10.91.00, 10.91.99" Error Messages**

### **Issue**

The control panel on the HP Color LaserJet CM6030/CM6040 MFP displays the error message Remove and Shake Black or Color Cartridges.

The control panel on the HP Color LaserJet CP6015 displays the error message 10.91.00 or 10.91.99 alternating with the error message. Remove and Shake Black or Color Cartridges.

- This error might appear immediately after a toner cartridge(s) has been replaced or without any specific action at all. Even if the toner cartridges have been reinstalled or replaced already one or two times, the error message persists.

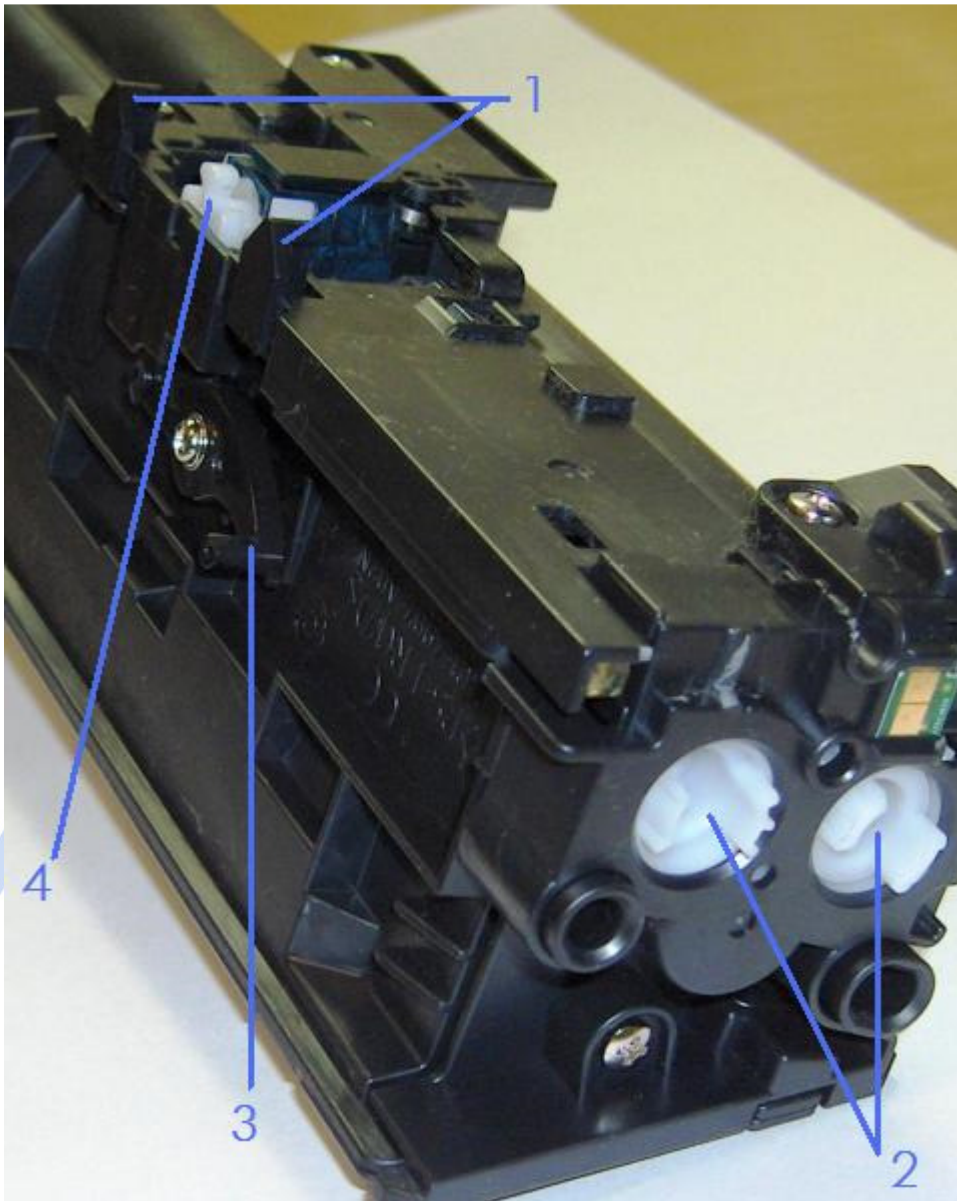
### **Cause**

Toner contamination inside the printer where the toner and drum cartridges are installed. Toner contamination occurs when the toner gates (small windows located in the drum cartridges and in the toner cartridges) are not synchronized and do not open and close properly due to a broken toner cartridge.

### **Step one: Inspect the toner cartridges**

1. Power OFF the printer.
2. Remove ALL the toner cartridges and position the cartridges upside down on a clean, flat surface, and then check each of the following toner cartridge components:
  - Plastic pins/actuators
  - White gears with plastic guides
  - White gear knob
  - Release lever with plastic pin

Figure 1: Toner Cartridge positioned upside down



1 - Plastic pins/actuators (Quantity 2)

2 - White gears with plastic guides

3 - White knob gear

4 - Release lever with plastic pin

3. If there are any broken parts, then replace the toner cartridge with the broken parts but do NOT reinstall the toner cartridges.
4. Continue to *Step two: Inspect the drum cartridge gates and seals.*

## Step two: Inspect the drum cartridge gates and seals

1. Remove ALL drum cartridges from the printer and position them on a clean, flat surface.
2. Inspect the top area of the drum cartridge for toner contamination.
  - If the top area is clean with little to no toner, then see the next step.
  - If there is excessive toner on top of the drum cartridge, then clean the drum cartridge using a vacuum (highly recommended) or a lint free cloth.

NOTE: If there is excessive toner on top of the drum cartridge, then the electrical sensors might be contaminated with toner and this could be the cause of the error message(s). A small amount of toner on top of the drum cartridge (see Figure 3) is considered acceptable.

3. Inspect the sponge seal on the drum cartridge.
  - If the seal is in good condition, then see the next step.
  - If the seal is bent or broken, then replace the drum cartridge with the damaged seal.

Figure 2: Sponge Seal in good condition



1 - Sponge Seal on drum cartridge

4. Inspect the toner gates on each of the four drum cartridges.
  1. If the toner gate on the drum cartridge is closed, then skip to *Step three: Inspect the toner cartridge gates.*

If the toner gate on the drum cartridge is open, then close the toner gate.

NOTE: When a toner or drum cartridge is removed from the printer, the toner gate should automatically switch to the closed position. If a toner gate is *open* when you reinstall it, the toner gate will automatically switch to the closed position and block toner from transferring from the toner cartridge to the drum cartridge. This condition can cause a 10.90.XY error code. To prevent this from occurring, make sure that the toner gate is *closed* before re-installing the cartridge into the printer.

1. Press down and hold the black button located behind the white knob.

Figure 3: Drum cartridge with toner gate closed



1 - Toner gate (closed)

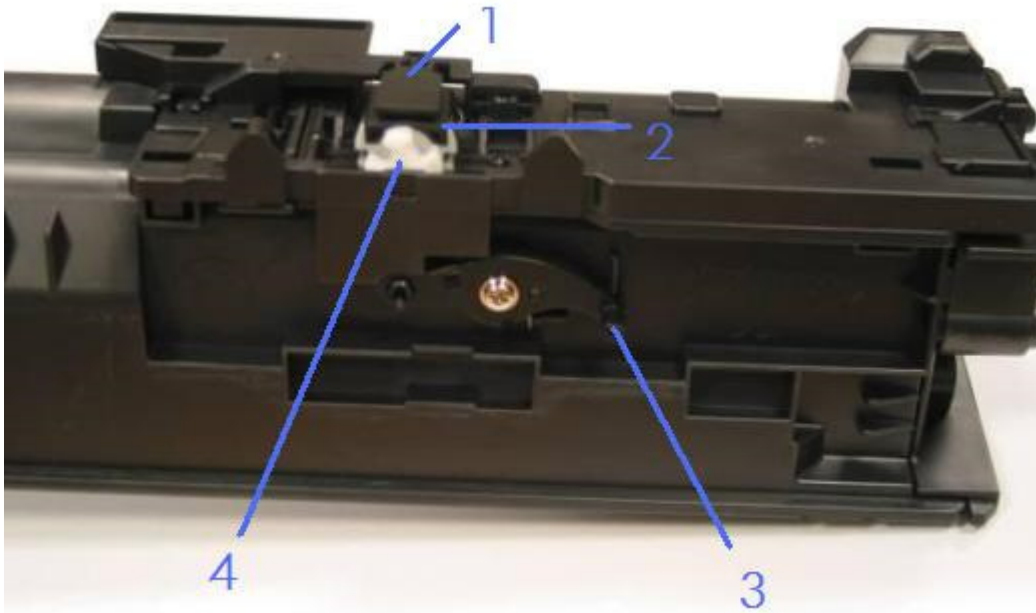
2 - Black button

3 - White gear knob

2. Rotate the white gear knob for one quarter of a whole rotation (90 degrees) or until the gate closes.
3. When the gate is closed, release the black button to lock the white knob in place.
4. Continue to *Step three: Inspect the toner cartridge gates.*

### Step three: Inspect the toner cartridge gates

1. Identify each of the following toner cartridge components:
  - Shutter
  - Toner gate (under the shutter)
  - Release lever and pin
  - White gear knob



1 - Shutter

2 - Toner gate (under the shutter)

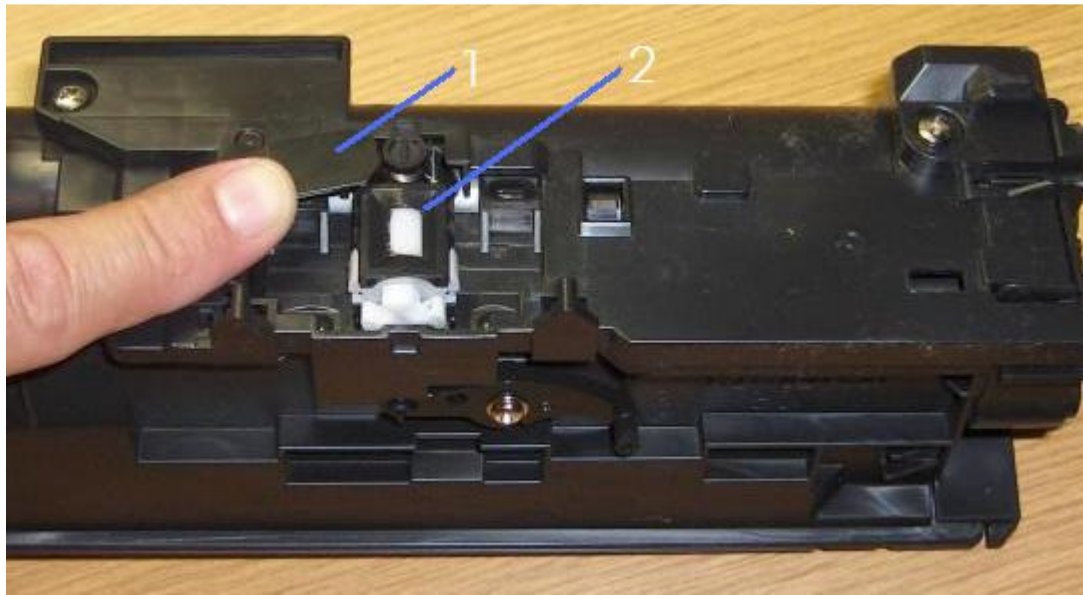
3 - Release lever and pin

4 - White gear knob

2. Inspect the bottom area of each toner cartridge for toner contamination.
  - If there is little to no toner on the bottom of the toner cartridge, see the next step.
  - If there is excessive toner on the bottom of the toner cartridge, then clean the toner cartridge using a vacuum (highly recommended) or a lint free cloth, and then see the next step.
3. Inspect the toner gates on each of the four toner cartridges.
  1. Ensure the toner cartridge is positioned upside down.
  2. Open the shutter to view the toner gate.

NOTE: The shutter swings out by pushing it either to the left or to the right.

Figure 4: Holding the shutter open; Toner cartridge with toner gate closed

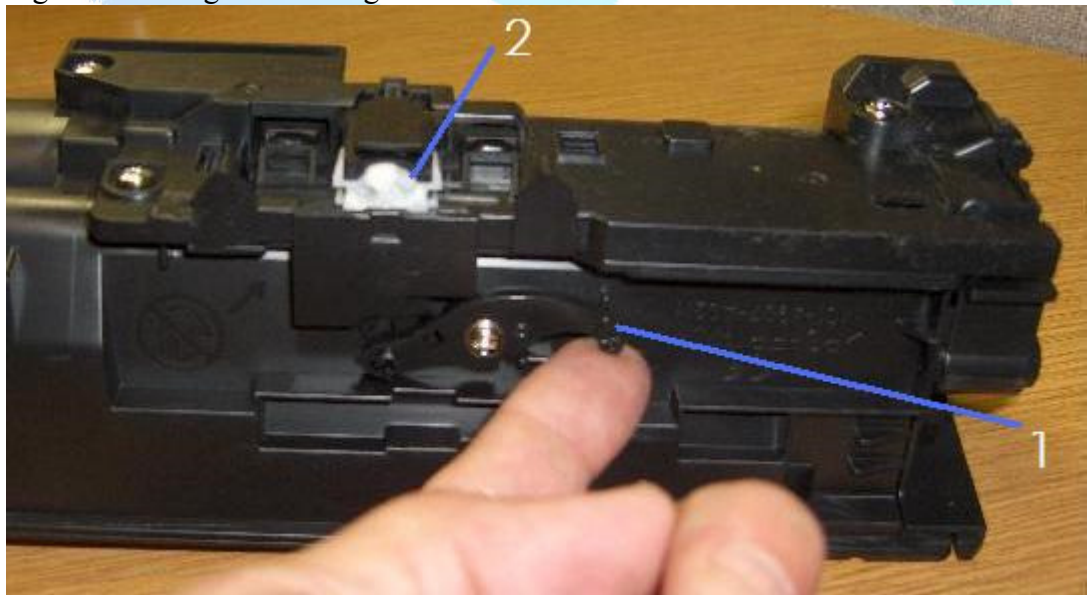


1 - Shutter

2 - Toner gate (closed)

- If the toner gate on the toner cartridge is open, see the next step.
  - If the toner gate on the toner cartridge is closed, skip to step 4.
3. Close the toner gate.
    1. Lift and hold the release lever.

Figure 5: Lifting and holding the release lever



1 - Release lever

2 - White gear knob

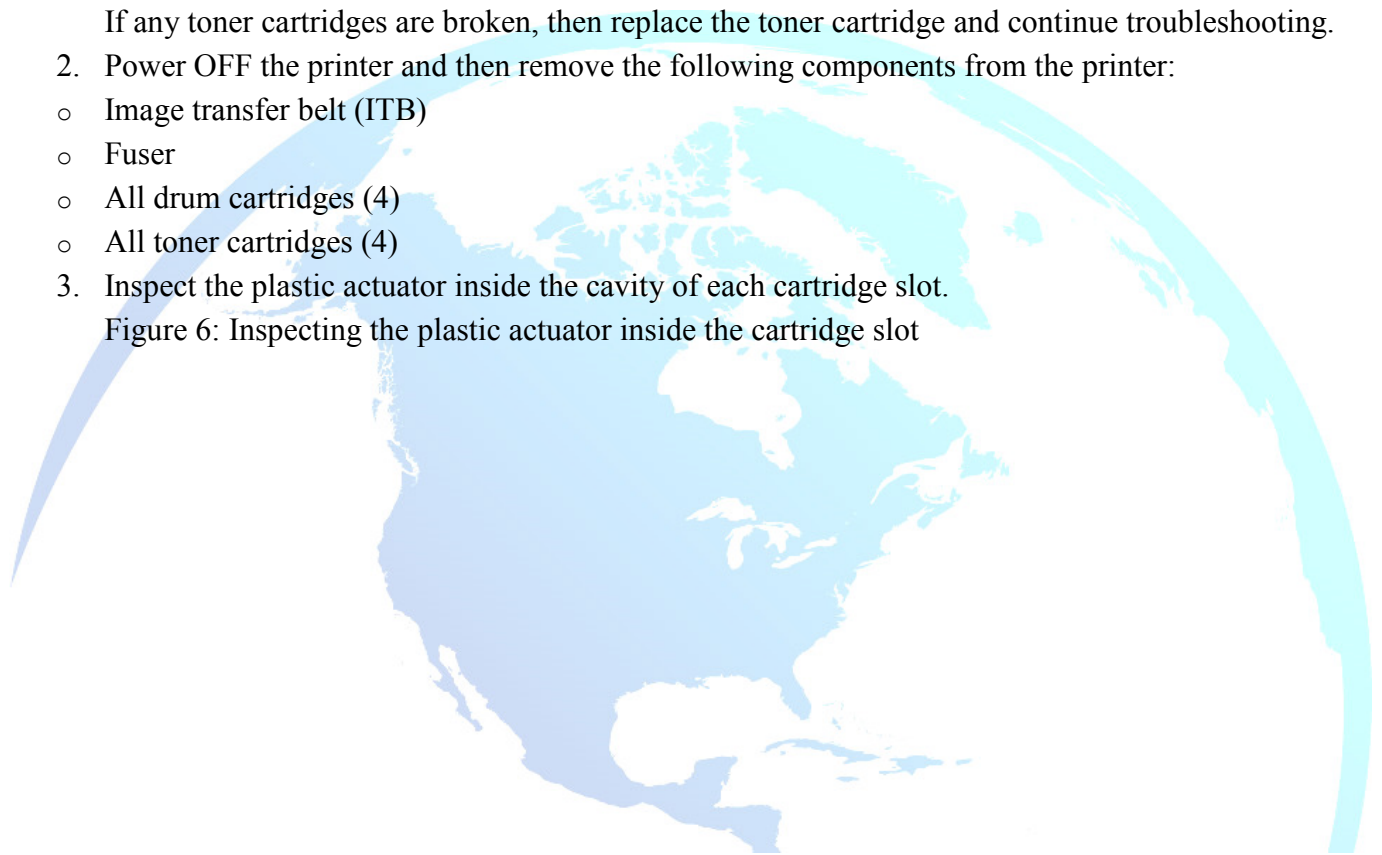
NOTE: The white gear can be turned in either direction but after rotating, it should be positioned with the spokes straight up and down. If the pin on the lever is broken, then this might be the cause of the error. Replace the toner cartridge.

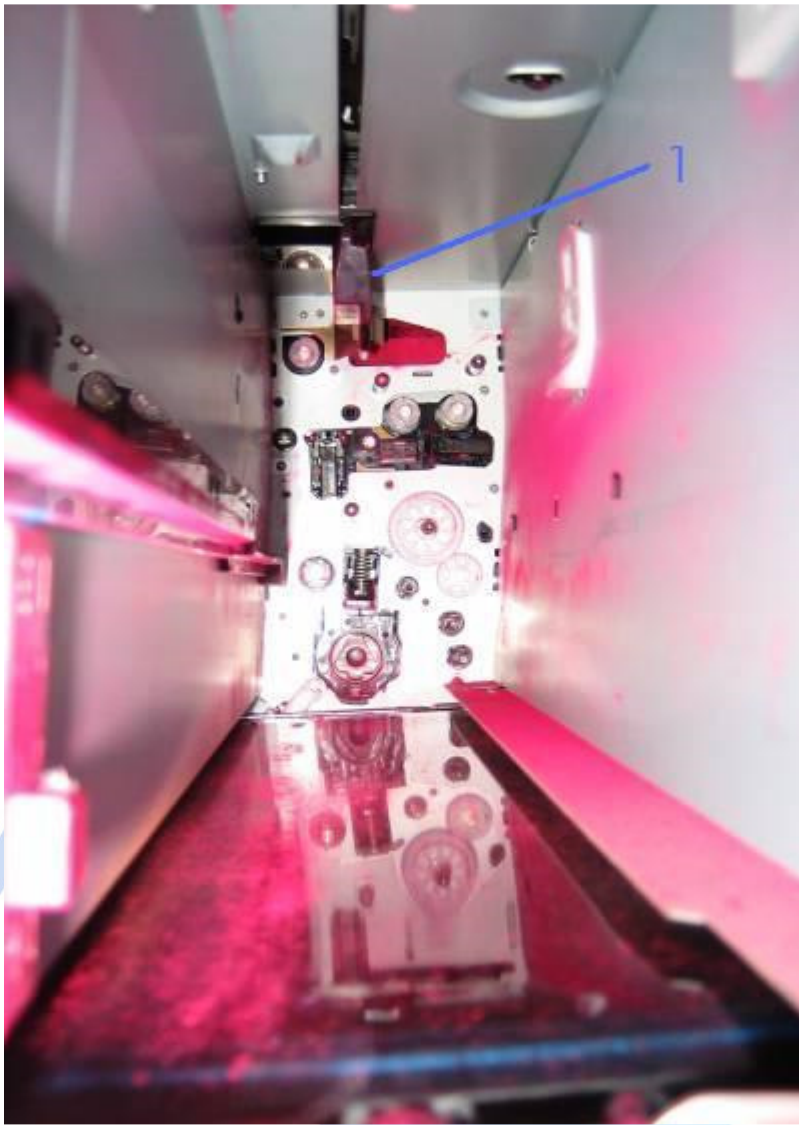
2. Rotate the white gear knob for one quarter of a whole rotation (90 degrees) or until the gate closes.
3. Open the shutter to make sure that the gate is closed.

4. After all toner gates on each toner cartridge are in the closed position, reinstall ALL the drum cartridges and toner cartridges.
5. Power ON the printer.  
NOTE: CALIBRATING might display on the control panel. If this occurs, please wait while the printer calibrates. The calibration ensures that toner is flowing from the toner cartridge into the drum cartridge to fill the hopper. It takes about 5 minutes for this process to complete.
  - o If the printer returns to a READY state, the issue is resolved.

#### **Step four: Inspect the plastic actuator, electrical contacts, and LEDs**

1. Make sure that ALL the steps above were properly performed by the customer, especially that there are not broken parts on each of the toner cartridges.  
If any toner cartridges are broken, then replace the toner cartridge and continue troubleshooting.
2. Power OFF the printer and then remove the following components from the printer:
  - o Image transfer belt (ITB)
  - o Fuser
  - o All drum cartridges (4)
  - o All toner cartridges (4)
3. Inspect the plastic actuator inside the cavity of each cartridge slot.  
Figure 6: Inspecting the plastic actuator inside the cartridge slot





1 - Plastic actuator inside each cartridge slot

- If the plastic actuator is present and in good condition, see the next step.
  - If the plastic actuator is broken, then this is the root cause of the problem. Replace the actuator for the appropriate cartridge slot.
    1. (Black) Left Side Wall Assembly = RM1-3233-000CN
    2. (Cyan) Partition - Plate Assembly = RM1-3238-000CN
    3. (Magenta) Partition - Plate Assembly = RM1-3237-000CN
    4. (Yellow) Partition - Plate Assembly = RM1-3235-000CN
4. Vacuum the printer inside and outside.
1. Vacuum the whole area inside of the printer where the toner and drum cartridges are normally installed.
  2. Vacuum the top and bottom areas of the drum and toner cartridges.
  3. Vacuum the electrical contacts that sense the presence of the cartridges.
- Figure 7: Electrical contacts and LEDs inside the cartridge slot





5. Re-install ALL the components and power ON the printer.
6. If the error persists, power OFF the printer and replace the toner cartridge in question.
  - If the cartridge that is causing the error is color, replace all three color cartridges at the same time (YMC).
  - If the cartridge that is causing the error is black, replace only the black cartridge.
7. Power ON the printer.

NOTE: The printer might not recognize installation of the new cartridge and the error will persist unless the printer is powered OFF before replacing the toner cartridge(s), and then powered ON after replacing the toner cartridges.

  - If the printer returns to a READY state, the issue is resolved.